## PECEIVED BENTRAL FAX CENTER OCT 18 2006

### Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1. (currently amended) A fluid delivery system, comprising:
- a fluid storage vessel for fluid-which feeds;
- a first pipe work loop;
- [[a]] said fluid storage vessel being in fluid communication with said first pipe work loop;
- said first pipe work loop including a first pump which urges fluid to flow in a first direction through said first pipe work loop at a first pressure and which follows a path of travel that returns to said fluid storage vessel.;

#### at least one pipe work branch;

said system includingfluid storage vessel also being in fluid communication with said at least one pipe work branch-fed from-said storage vessel or said first pipe-work loop,;

said pipe work branch including a second pump which urges fluid to flow through said pipe work branch at a second pressure downstream of said second pump, each pipe work branch terminating in;

- a branch manifold positioned in said pipe work branch downstream of said second pump;
- said branch manifold having at least a fluid inlet and at least one or more fluid outlets outlet:
- at least a first offtake positioned downstream of said branch manifold:
- to the latter of which are connected one or more hoses which feed one or more offickes at least a first fluid outlet of said branch manifold and said at least a first officke from which fluid can be drawn from the system,

each branch manifold providing a corresponding return manifold in fluid communication with said first pipe work loop to which said offlukes are connected by further hases such that fluid can flow from said branch manifold through said hoses and thence through said return manifold

a return manifold in said first pipe work loop, downstream of said first pump, said return manifold having a fluid inlet and at least one fluid outlet:

at least a second hose providing fluid communication between said first fluid outlet of said return manifold and said at least one offtake:

and characterized in that the whereby fluid having flowed flows in said first direction through the return manifold and is returned to the fluid storage vessel when the offices are at least one office is closed;

and whereby opening of said one or more offiakes, and thus the opening of at least one offiake opens said system to atmospheric pressure at one or more locations, causes the direction of fluid flow to reverse in the one or more hoses which connect said one or more opened offiakes with the return manifold, said one or more opened offiakes being supplied with fluid from both the branch manifold and return manifold.

whereby fluid flowing in said first direction is made to flow in a second direction opposite to said first direction when said at least one offtake is opened:

whereby said at least one offiake is supplied with fluid from said return manifold and said branch manifold when said fluid flow is reversed:

whereby said system delivers sterile liquid to at least one remote location downstream from said tirst offtake while maintaining a continuous flow through the system to inhibit bacterial growth; and

whereby said system has two fluid-carrying circuits that simultaneously deliver water from said fluid storage vessel to a plurality of offakes when at least one offake is open and that keep the water circulating when at least one offake is closed, accomplishing the latter by reversing the

flow in the first of the two circuits so that the fluid in both circuits is circulating all the time and under any configuration of officke closings or openings, said constant circulation inhibiting bacterial prowth in the absence of disinfectants and elevated fluid temperatures.

- 2. (cancelled)
- 3. (cancelled)
- 4. (currently amended) A fluid delivery system according to any preceding claim 1. characterized in that said further comprising:

said return manifold is provided with including a primary fluid inlet and a primary fluid outlet to allow for connection of said return manifold within the first pipe work loop and a plurality of secondary outlets to which said first hoses having offlakes may be are connected to allow for fluid communication with the branch manifold offtakes.

5. (currently amended) A fluid delivery system according to any of claims 1-3 claim 1. characterized in that the further comprising:

said branch manifold is provided withincluding a primary fluid inlet and only a plurality of secondary outlets to which said second hoses having of takes may be are connected such that the fluid flowing into said branch manifold is urged into one or more constrained to flow to said hoses of takes.

6. (currently amended) A fluid delivery system according to any preceding claim 1, characterized in that the further comprising:

said fluid pressure within the return manifold isbeing greater than the fluid pressure in the branch manifold.

7. (currently amended) A fluid delivery system according to any preceding claim 1. characterized in that the further comprising:

said pressures in the branch and return manifolds are being above ambient atmospheric pressure such that the opening of an offtake opens the fluid within said branch and return manifolds to atmospheric pressure and the fluid flow direction in the length of first hose between said offtake and said return manifold reverses and bothso that said fluid is constrained by said branch and return manifolds urge fluid to flow towards said open offtake.

- 8. (currently amended) A fluid delivery system according to any preceding claim 1, characterized in that, further comprising:
- a plurality of hose connections are made between the branch manifold and the return manifold, each connection consisting of a first hose, one first end of which is connected to one secondary fluid outlet of the branch return manifold and the alternate a second end of which is connected to an offtake, a second hose having one a second end connected to the offtake and the alternate a first end connected to a secondary fluid outlet of the return branch manifold.
- 9. (currently amended) A fluid delivery system according to claim 8 characterized in that, further comprising:

each respective hose connection between branch and return manifolds consists only of sharing a single common of take.

10. (currently amended) A fluid delivery system according to claim 8-characterized in that. further comprising:

each connection consists of including said first and second hoses, first ends of which are connected to the branch and return manifolds respectively, alternatesecond ends of said hoses being which are connected to first and second primary offtakes., and the connection further comprising one or more secondary offtakes interconnected by intermediary hoses between said first and second primary offtakes and second secondary offtakes.

11. (currently amended) A fluid delivery system according to any preceding claim 1, characterized in that further comprising:

each hose is being made of a flexible polymeric or plastics material such as PTFE.

12. (currently amended) A fluid delivery system according to any preceding claim 11, characterized in that, further comprising:

said hose having a diameter is in the region of about 5-25mm.

13. (currently amended) A fluid delivery system according to any proceeding claim 1, characterized in that, further comprising:

at least one of the first or second pumps is being dynamically controlled depending on the fluid pressure within the respective return or branch manifold, and most preferably the pump driving fluid through the first pipe work loop is being dynamically controlled depending on the instantaneous fluid requirements of the system. i.e. such as the number of offtakes which are open at any one instant.

14. (currently amended) A fluid delivery system according to claim 13-characterized in that, further comprising:

only the second pump is being dynamically controlled according to the fluid pressure within the respective return and branch manifolds.

15. (currently amended) A fluid delivery system for the delivery of sterile fluid to a number of offtakes, each offtake selectively movable between open and closed eonditions configurations, said system including a storage vessel and fluid cleaning components provided in line in a first pipe work loop, said pipe work loop including a first pump to urge fluid through said pipe work loop at a first pressure and return fluid to the storage vessel, said pipe work loopsystem including a branch manifold and a return manifold, and characterized in that said branch and return manifold includeincluding, for each offtake, a pipe connection leading from the respective manifolds to said offtake such that [[,]] each of the plurality of offtakes is connected in parallel to the branch and return manifolds [[,]], wherein an opening an offtake causes a supply of fluid to that offtake via a respective pipe from the branch and return manifold and does not affect the

fluid in the pipework to the other offtakes and causes the direction of fluid flow to reverse in the one or more pipes which connect said one or more opened offtakes with the return manifold.

- 16. (cancelled)
- 17. (cancelled)
- 18. (new) A fluid delivery system, comprising:
- a fluid storage vessel;
- a first pipe work loop;

said fluid storage vessel being in fluid communication with said first pipe work loop;

said first pipe work loop including a first pump which urges fluid to flow in a first direction through said first pipe work loop at a first pressure and which follows a path of travel that returns to said fluid storage vessel;

at least one pipe work branch;

said fluid storage vessel also being in fluid communication with said at least one pipe work branch;

said pipe work branch including a second pump which urges fluid to flow through said pipe work branch at a second pressure downstream of said second pump;

a branch manifold positioned in said pipe work branch downstream of said second pump;

at least a first offtake positioned downstream of said branch manifold;

at least a first hose providing fluid communication between said branch manifold and said at least a first offtake from which fluid can be drawn from the system;

a return manifold in said first pipe work loop downstream of said first pump;

at least a second hose providing fluid communication between the return manifold and said at least one offtake;

whereby fluid flows in said first direction through the return manifold and is returned to the fluid storage vessel when said at least one offtake is closed;

whereby opening of said at least one offtake opens said system to atmospheric pressure;

whereby fluid flowing in said first direction between said return manifold and said at least one offtake is made to flow in a second direction opposite to said first direction when said at least one offtake is opened;

whereby said at least one offtake is supplied with fluid from said return manifold and said branch manifold when said fluid flow is reversed.

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